

ABSTRACT:

An improved representation of transients in audio signals comprises modifying transient locations in such a way that a transient can occur only at a beginning of a sinusoidal segment. The modification procedure comprises the steps:

- detecting a beginning and an end of a transient using an energy-based approach with two sliding rectangular windows;
- moving samples between the beginning and the end of the transient to the locations specified by the segmentation used; and
- time-warping the signal parts in between the transients in order to fill the intervals between the modified transients.

(Figure 9)